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Page 1 of 9

MAY 16 2002

#11 1638

TECH CENTER 1600/2900



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1600

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002

TIME: 14:19:20

Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

4 <110> APPLICANT: Schulze-Lefert, Paul MJ  
5 Panstruga, Ralph  
6 Buschges, Rainer  
8 <120> TITLE OF INVENTION: Polynucleotide and its use for modulating a defence  
9 response in plants  
11 <130> FILE REFERENCE: 620-58  
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/722,377  
C--> 14 <141> CURRENT FILING DATE: 2000-11-28  
16 <150> PRIOR APPLICATION NUMBER: PCT/GB97/02046  
17 <151> PRIOR FILING DATE: 1997-07-29  
19 <150> PRIOR APPLICATION NUMBER: GB 9615879.5  
20 <151> PRIOR FILING DATE: 1996-07-29  
22 <150> PRIOR APPLICATION NUMBER: GB 9622626.1  
23 <151> PRIOR FILING DATE: 1996-10-30  
25 <150> PRIOR APPLICATION NUMBER: GB 9704789.8  
26 <151> PRIOR FILING DATE: 1997-03-07  
28 <160> NUMBER OF SEQ ID NOS: 79  
30 <170> SOFTWARE: PatentIn Ver. 2.1  
32 <210> SEQ ID NO: 1  
33 <211> LENGTH: 533  
34 <212> TYPE: PRT  
35 <213> ORGANISM: Hordeum vulgare  
37 <400> SEQUENCE: 1  
38 Met Ser Asp Lys Lys Gly Val Pro Ala Arg Glu Leu Pro Glu Thr Pro  
39 1 5 10 15  
41 Ser Trp Ala Val Ala Val Val Phe Ala Ala Met Val Leu Val Ser Val  
42 20 25 30  
44 Leu Met Glu His Gly Leu His Lys Leu Gly His Trp Phe Gln His Arg  
45 35 40 45  
47 His Lys Lys Ala Leu Trp Glu Ala Leu Glu Lys Met Lys Ala Glu Leu  
48 50 55 60  
50 Met Leu Val Gly Phe Ile Ser Leu Leu Leu Ile Val Thr Gln Asp Pro  
51 65 70 75 80  
53 Ile Ile Ala Lys Ile Cys Ile Ser Glu Asp Ala Ala Asp Val Met Trp  
54 85 90 95  
56 Pro Cys Lys Arg Gly Thr Glu Gly Arg Lys Pro Ser Lys Tyr Val Asp  
57 100 105 110  
59 Tyr Cys Pro Glu Gly Lys Val Ala Leu Met Ser Thr Gly Ser Leu His  
60 115 120 125  
62 Gln Leu His Val Phe Ile Phe Val Leu Ala Val Phe His Val Thr Tyr  
63 130 135 140  
65 Ser Val Ile Thr Ile Ala Leu Ser Arg Leu Lys Met Arg Thr Trp Lys  
66 145 150 155 160

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Input Set : A:\620\_58.app

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68 Lys Trp Glu Thr Glu Thr Thr Ser Leu Glu Tyr Gln Phe Ala Asn Asp
69          165          170          175
71 Pro Ala Arg Phe Arg Phe Thr His Gln Thr Ser Phe Val Lys Arg His
72          180          185          190
74 Leu Gly Leu Ser Ser Thr Pro Gly Ile Arg Trp Val Val Ala Phe Phe
75          195          200          205
77 Arg Gln Phe Phe Arg Ser Val Thr Lys Val Asp Tyr Leu Thr Leu Arg
78          210          215          220
80 Ala Gly Phe Ile Asn Ala His Leu Ser Gln Asn Ser Lys Phe Asp Phe
81 225          230          235          240
83 His Lys Tyr Ile Lys Arg Ser Met Glu Asp Asp Phe Lys Val Val Val
84          245          250          255
86 Gly Ile Ser Leu Pro Leu Trp Gly Val Ala Ile Leu Thr Leu Phe Leu
87          260          265          270
89 Asp Ile Asn Gly Val Gly Thr Leu Ile Trp Ile Ser Phe Ile Pro Leu
90          275          280          285
92 Val Ile Leu Leu Cys Val Gly Thr Lys Leu Glu Met Ile Ile Met Glu
93          290          295          300
95 Met Ala Leu Glu Ile Gln Asp Arg Ala Ser Val Ile Lys Gly Ala Pro
96 305          310          315          320
98 Val Val Glu Pro Ser Asn Lys Phe Phe Trp Phe His Arg Pro Asp Trp
99          325          330          335
101 Val Leu Phe Phe Ile His Leu Thr Leu Phe Gln Asn Ala Phe Gln Met
102          340          345          350
104 Ala His Phe Val Trp Thr Val Ala Thr Pro Gly Leu Lys Lys Cys Tyr
105          355          360          365
107 His Thr Gln Ile Gly Leu Ser Ile Met Lys Val Val Val Gly Leu Ala
108          370          375          380
110 Leu Gln Phe Leu Cys Ser Tyr Met Thr Phe Pro Leu Tyr Ala Leu Val
111 385          390          395          400
113 Thr Gln Met Gly Ser Asn Met Lys Arg Ser Ile Phe Asp Glu Gln Thr
114          405          410          415
116 Ser Lys Ala Leu Thr Asn Trp Arg Asn Thr Ala Lys Glu Lys Lys Lys
117          420          425          430
119 Val Arg Asp Thr Asp Met Leu Met Ala Gln Met Ile Gly Asp Ala Thr
120          435          440          445
122 Pro Ser Arg Gly Ser Ser Pro Met Pro Ser Arg Gly Ser Ser Pro Val
123          450          455          460
125 His Leu Leu His Lys Gly Met Gly Arg Ser Asp Asp Pro Gln Ser Ala
126 465          470          475          480
128 Pro Thr Ser Pro Arg Thr Gln Gln Glu Ala Arg Asp Met Tyr Pro Val
129          485          490          495
131 Val Val Ala His Pro Val His Arg Leu Asn Pro Asn Asp Arg Arg Arg
132          500          505          510
134 Ser Ala Ser Ser Ser Ala Leu Glu Ala Asp Ile Pro Ser Ala Asp Phe
135          515          520          525
137 Ser Phe Ser Gln Gly
138          530
142 <210> SEQ ID NO: 2

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## RAW SEQUENCE LISTING

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TIME: 14:19:20

Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

143 &lt;211&gt; LENGTH: 1602

144 &lt;212&gt; TYPE: DNA

145 &lt;213&gt; ORGANISM: Hordeum vulgare

147 &lt;400&gt; SEQUENCE: 2

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148 atgtcggaca aaaaagggtt gccggcgcgg gagctgccgg agacgccgtc gtgggcgggtg 60
149 gcggtggtct tcgcccgcct ggtgctcgtg tccgtcctca tggaacacgg cctccacaag 120
150 ctccggccatt ggttccagca ccggcacaaag aaggccctgt gggaggcgct ggagaagatg 180
151 aaggcgggagc tcatgctggt gggcttcata tccctgctcc tcatcgtcac gcaggacccc 240
152 atcatcgcca agatatgcat ctccgaggat gccgcgacg tcatgtggcc ctgcaagcgc 300
153 ggcaccgagg gccgcaagcc cagcaagtac gttgactact gcccgagggg caaggtggcg 360
154 ctcatgtcca cgggcagctt gcaccagctg cactgtctca tcttcgtgct cgcggtcttc 420
155 catgtcacct acagcgtcat caccatagct ctaagccgtc tcaaatgag aacatggaag 480
156 aaatgggaga cagagaccac ctccctggaa taccagttcg caaatgatcc tgcacggttc 540
157 cggttcacgc accagacgtc gttcgtgaag cgccacctgg gectctccag caccctggc 600
158 atcagatggg tgggtggcctt ctccaggcag ttcttcagggt cagtcaccaaa ggtggactac 660
159 ctgaccttga gggcaggctt catcaacgcg catctgtcgc aaaacagcaa gttcgacttc 720
160 cacaagtaca tcaagaggtc gatggaggac gacttcaagg tcgtcgtcgg catcagcctc 780
161 ccgctgtggg gtgtggcgat cctcaccctc ttcttgaca tcaatggggt tggcacgctc 840
162 atctggattt ctctcatccc tctcgtgatc ctctgtgtgt ttggaaccaa gctggagatg 900
163 atcatcatgg agatggcctt ggagatccag gaccggcgga gcgtcatcaa gggggccccc 960
164 gtggtcgagc ccagcaacaa gttcttcttg ttccaccgcc ccgactgggt cctcttcttc 1020
165 atacacctga cgttgttcca gaacgcgttt cagatggcgc attttgtgtg gacagtggcc 1080
166 acgcccggct tgaagaaatg ctaccacacg cagatcgggc tgagcatcat gaaggtgggtg 1140
167 gtggggctag ctctccagtt cctctgcagc tatatgacct tccccctcta cgcgctcgtc 1200
168 acacagatgg gatcaaacat gaagagggtc atcttcgacg agcagacgtc caaggcgctc 1260
169 accaactggc ggaacacggc caaggagaag aagaaagtcc gagacacgga catgctgatg 1320
170 gctcagatga tcggcgacgc aacaccgagc cgaggctcgt cgcgatgcc gagccggggc 1380
171 tcatcaccgc tgcacctgct tcacaagggc atggggcggt cggacgacct ccagagcgcg 1440
172 ccacctcgc caaggaccca gcaggaggct agggacatgt acccggttgt ggtggcgcac 1500
173 ccggtgcaca gactaaatcc taacgacagg aggaggtccg cctcgtcgtc ggccctcgaa 1560
174 gccgacatcc ccagtgcaga ttttctcttc agccagggat ga 1602

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177 &lt;210&gt; SEQ ID NO: 3

178 &lt;211&gt; LENGTH: 2098

179 &lt;212&gt; TYPE: DNA

180 &lt;213&gt; ORGANISM: Hordeum vulgare

182 &lt;400&gt; SEQUENCE: 3

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183 gcggagctca tgctggtggg cttcatatcc ctgctcctca tcgtcacgca ggaccccatc 60
184 atcgccaaga tatgcattct cgaggatgcc gccgacgtca tgtggccctg caagcgcggc 120
185 accgagggcc gcaagcccag caagtacgtt gactactgcc cggagggtgag cagcagagcc 180
186 cggaccagca gcttcacgat gatgaagaaa tcaataccga actttttctt gttttcttct 240
187 gattgtcgtc ttggcttggc ttaattggtg tgtgtgtgtg tgtttgcagg gcaagggtggc 300
188 gctcatgtcc acgggcagct tgcaccagct gcacgtcttc atcttcgtgc tcgcggtctt 360
189 ccattgtcac tacagcgtca tcaccatagc tctaagccgt ctcaaagtga gcctttgctt 420
190 cttcttcttc ttcttttacc gcacgtctgt ctgtcaggcg tacctacctg ttcatcaggc 480
191 ttgagtaaaa ctgttccata atctgtcccg gcataatcct ctctcctgc agatgagaac 540
192 atggaagaaa tgggagacag agaccacctc cttggaatac cagttcgcaa atggtcaggc 600
193 tccccactc tgcaatctcc cttcttcga aaccaaacct gatgatccat ttaaagacgc 660
194 aggcacgatc agagtgagtg aactgatgta tgttcatttt ttgtgtcctt tcagatcctg 720
195 cacggttccg gttcacgcac cagacgtcgt tcgtgaagcg ccacctgggc ctctccagca 780

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196 cccctggcat cagatgggtg gtgagttttt tagctttotta tctgcccctc atctgtgtgt 840
197 aatgttttgc gtatggagtc aggtgattta ccttgccctgt gatgtttgtt gccttgtcag 900
198 gtggccttct tcaggcagtt cttcaggtca gtcaccaagg tggactacct gaccttgagg 960
199 gcaggcttca tcaacgtacg tgcctcccct tctagctccg ccattgctgc cgcgatgtag 1020
200 cagcaaagct tctcaagtta tccttctgac gctaaagttc ccatgttttt tcctcaaatt 1080
201 attctgcgca ggcgcatttg tcgcaaaaaca gcaagttcga cttccacaag tacatcaaga 1140
202 ggctgatgga ggacgacttc aaggctcgtc tcggcatcag gtacgttcca ttccttccctc 1200
203 tgcaccacac cacaccccat ggatagattt taacaattgc tgtcaggttc cacatgataa 1260
204 caatatacta tgaacttggc ctttgcctct tgccttgcga cgatcatgac acatttggcc 1320
205 tgttttcgca gctcccctgt gtggggtgtg gcgactctca cctcttctct tgacatcaat 1380
206 ggtatggacc ttctcctctc cgttttctct attgctttgc agctaaataa aacacttgca 1440
207 attcgtctcg tgatcaccgc tcatttttca accatttctt tttctactca taggggttgg 1500
208 cacgctcatc tggatttctt tcatccctct cgtggtaagt gcagatttct ccatcgaaag 1560
209 caacagcaaa cccaatttga tcgcaatgga aaccacacac taatattaac tcaaaatgtc 1620
210 aattgtcggc gctcttctct caacagatcc tcttgtgtgt tggaaaccaag ctggagatga 1680
211 tcatcatgga gatggccctg gagatccagg accgggagag cgtcatcaag ggggcccccg 1740
212 tggctgagcc cagcaacaag ttcttctggt tccaccgccc cgactgggtc ctcttcttca 1800
213 tacacctgac gttgttccag aacgcgtttc agatggcgca ttttgtgtgg acagtggtag 1860
214 gccaccgatg aacttgtcag ttaacatggg tgtcaaggca ccgagtgcg ctgatgaact 1920
215 gctctgacgg agatttactt gtgttgtagg ccacgcccgg cttgaagaaa tgctaccaca 1980
216 cgcagatcgg gctgagcatc atgaagggtg tgggtggggt agctctccag ttcctctgca 2040
217 gctatatgac cttccccctc tacgcgctcg tcacacaggt aataaaaccg tccaggaa 2098

```

220 &lt;210&gt; SEQ ID NO: 4

221 &lt;211&gt; LENGTH: 2177

222 &lt;212&gt; TYPE: DNA

223 &lt;213&gt; ORGANISM: Oryza sativa

225 &lt;220&gt; FEATURE:

226 &lt;221&gt; NAME/KEY: misc\_feature

227 &lt;222&gt; LOCATION: (4, 27, 66, 119, 136, 152, 155, 192)

228 &lt;223&gt; OTHER INFORMATION: n is a or g or c or t

230 &lt;220&gt; FEATURE:

231 &lt;221&gt; NAME/KEY: misc\_feature

232 &lt;222&gt; LOCATION: (213, 241, 243, 246, 250, 456)

233 &lt;223&gt; OTHER INFORMATION: n is a or g or c or t

235 &lt;400&gt; SEQUENCE: 4

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W--> 236 gcanagctga tgctgctggg cttcatntcc ctgcttctca cctgtggcaca ggcgcccac 60
W--> 237 tccaanatct gcatcccca gtcggctgcc aacatcttgt tgccgtgcaa ggcagggcna 120
W--> 238 gatgccatcg aagaanaagc agcaagtggc cncngtctt tggccggcgc cggcggcggg 180
W--> 239 gactactgct cnaaattcga tgtgagaata acnccagctg ccggcaagca caacctcgat 240
W--> 240 ncnatnactn atttaactat aattgatttt tcttgggttt tctgcagggc aagggtggcgc 300
241 tgatgtcggc aaagagcatg caccagctgc acattttcat cttcgtgctc gccgtgttcc 360
242 atgttaccta ctgcatcatc accatgggtt tagggcgcc caaagtgagt ttgtcgttct 420
W--> 243 gtccctcatg cacatgtttt ctctagttct agcaanattg tcagtccttc aaatggattg 480
244 ttctgacaag aaacccaatt tattaatttg ccagttaaat atataataat tgatctttct 540
245 tgggttttaga tgaagaaatg gaagaagtgc gactcacaga ccaactcatt ggagtatcag 600
246 ttcgcaatcg gtagtgaatt aagaatctcc ctactattt catttcagaa cctttatgat 660
247 aatgtcttga aagaggagga gcaaatcagc tgaaaaatat gatcgatcca tgcagatcct 720
248 tcacgattca ggttcacgca tcagacgtcg ttctggaagc ggcactctgg atcattctca 780
249 agcaccctcg ggctcagatg gatcgtgagt tatcaatctc cgaatacatg cttgtttttt 840

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## RAW SEQUENCE LISTING

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DATE: 05/09/2002

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Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

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250 attcttgcaa ctggcctagc tgttccaatt caatccatat tttttgaaaa aaaaaatatt 900
251 catgccgtgt ttgttgtag gtagcattct tcaggcagtt ctttggtcc gtcaccaagg 960
252 tggactacct gaccatgccg caaggcttca tcaatgtata tactaatcaa acctgaccaa 1020
253 ttcaacattg atgatgcaaa cagaagacca ggtttttttt ttccgagttg tgcattgaag 1080
254 ttaatggttt tagcttcttc tcttttgtag gcgccatttg tcgcagaata gcaagttcga 1140
255 cttccacaaa tacatcaaga ggtctttgga ggacgacttc aaagtgtgctg ttggcatcag 1200
256 gtccgtcctc gctttattaa ttataggact cttatattca acattttttt tataaagaaa 1260
257 catatttagt ctccagttgt gtatgtgtat gtggatcttg acacatttgg ctggttttgc 1320
258 agcctccctc tgtggttctg cggaatcctt gtactcttcc tcgatatcca cggtaatcct 1380
259 tgtcctattt cattcttttt ttactcttca aaacctgtgt ctgaattggt cttataatca 1440
260 ccacgcattt tttttcaact tttcccccgc gtgtaggtct tggcacactt atttggatct 1500
261 cttttgttcc tctcatcgta agagcgaaat ttcccctgtc caaagaaaca gttaacataa 1560
262 ttaattatgc ttaatttat catgaaaatt aatatgatca tataactaat gaacaaacat 1620
263 tcatgtgaat gccaccgttg tctcagatcg tcttgtagt tgggaccaag ctagagatgg 1680
264 tgatcatgga gatggcccaa gagatacagg acagggccac tgtgatccag ggagcaccta 1740
265 tggttgaacc aagcaacaag tacttctggt tcaaccgccc tgactgggtc ttgttcttca 1800
266 tacacctgac actcttccca tgtacatggt taaaaccgac ggacggatcg atogatcacc 1860
267 agaacgcatt ttcagatggc gcattcgtag ggactatggt gtgtatgcta cttgcttagt 1920
268 tgttgccatt atcagttctt aagcaaatta agtgtgatgc atgcactgac taatgagaca 1980
269 aaaaatgaca cagcttgttc atcgatctgg ttgttttgtg tgtgacaggc aacacctggt 2040
270 ctgaagaaat gcttccatga aaatatttgg ctgagcatcg tggaaatcat tgtggggatc 2100
271 tctcttcagg tgctatgcag ctagatcacc ttcccgtctc acgcgctcgt cacacaggtg 2160
272 aacaagcaat tcacaaa 2177
275 <210> SEQ ID NO: 5
276 <211> LENGTH: 2431
277 <212> TYPE: DNA
278 <213> ORGANISM: Hordeum vulgare
280 <400> SEQUENCE: 5
281 gagctcatgc tgggtgggctt catatccctg ctctcatcg tcacgcagga ccccatcacc 60
282 gccaaagatat gcatctccga gtagccgcc gacgtcatgt ggccctgcaa gcgcggcacc 120
283 gagggccgca agcccagcaa gtacgttgac tactgcccg aggtgagcag cagagcccgg 180
284 accagcagct tcacgatgat gaagaaatca ataccgaact ttttcttgtt ttctctgat 240
285 tgtcgtcttg gcttggttta attggtgtgt gtgtgtgtgt ttgcagggca aggtggcgct 300
286 catgtccacg ggcagcttgc accagctgca cgtcttcacc ttctgtctcg cggctctcca 360
287 tgtcacctac agcgtcatca ccatagctct aagccgtctc aaagttagcc tttgcttctt 420
288 cttcttcttc ttttaccgca cgtctgtctg tcaggcgtag ctacctgttc atcaggcttg 480
289 agtaaaactg ttccataatc tgctccggca taatcctctc ctctgcaga tgagaacatg 540
290 gaagaaatgg gagacagaga ccacctcctt ggaataccag ttcgcaaag gtcaggatcc 600
291 cccactctgc aatctccctt tcttcgaaac caaacctgat gatccattta aagacgcagg 660
292 cagatcaga gtgagtgaac tgatgtatgt tcattttttg tgcctttca gatcctgcac 720
293 ggttccgggtt cagcgcagg acgtcgttgc tgaagcgcca cctgggcctc tccagcacc 780
294 ctggcatcag atgggtggtg agtttttttag cttcttatct ggctgtgat gtttgttgc 840
295 ttgtcaggtg gccttcttca ggcagttctt caggtcagtc accaaggtgg actacctgac 900
296 cttgagggca ggcttcatca acgtacgtgc ctccccttct agctccgcca ttgtgcgcg 960
297 gatgtagcag ccaaattatt ctgcgcaggc gcatttgtcg caaaacagca agttcgactt 1020
298 ccacaagtac atcaagaggt cgatggagga cgacttcaag gtcgtcgtcg gcatcaggta 1080
299 cgttccattc cttcctctgc accacaccac acccatgga tagattttaa caattgctgt 1140
300 caggttccac atgataacaa tatactatga acttggctct tgcctcttgt ccttgcaaga 1200
301 tcatgacaca tttggcctgt tttcgagcc tcccgtgtg ggggtgtggc atcctcacc 1260

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**RAW SEQUENCE LISTING ERROR SUMMARY**  
**PATENT APPLICATION: US/09/722,377**

DATE: 05/09/2002  
 TIME: 14:19:21

Input Set : A:\620\_58.app  
 Output Set: N:\CRF3\05092002\I722377.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; N Pos. 4,27,66,119,136,152,155,192,213,241,243,246,250,456  
 Seq#:6; N Pos. 7,90,93,115,177,183,217,249,254,272,356,357,364,1017,1037  
 Seq#:6; N Pos. 1041,1458,1616,1641,1861,1879,1923,2050  
 Seq#:21; Xaa Pos. 23,29,48,84,85  
 Seq#:23; Xaa Pos. 23  
 Seq#:27; Xaa Pos. 14  
 Seq#:29; Xaa Pos. 93  
 Seq#:31; Xaa Pos. 29  
 Seq#:33; Xaa Pos. 6,33,51,64,79  
 Seq#:35; Xaa Pos. 10,17,19,47  
 Seq#:37; Xaa Pos. 6  
 Seq#:41; Xaa Pos. 29  
 Seq#:43; Xaa Pos. 14,15  
 Seq#:45; Xaa Pos. 12,27,51  
 Seq#:47; Xaa Pos. 3  
 Seq#:49; Xaa Pos. 2  
 Seq#:50; N Pos. 68,88,143,181,251,254,328,333,337,341,348,349,356,357,368  
 Seq#:50; N Pos. 370,372,373,381  
 Seq#:51; N Pos. 68,181,284,296,302,331,333,339,340,341,351,357,358,366,367  
 Seq#:51; N Pos. 368,369,378,381  
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 Seq#:55; N Pos. 134,153,167,176,235,280,354,362  
 Seq#:56; N Pos. 164

## VERIFICATION SUMMARY

DATE: 05/09/2002

PATENT APPLICATION: US/09/722,377

TIME: 14:19:21

Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:60  
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:120  
L:239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:180  
L:240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:240  
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:420  
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:347 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:60  
L:348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:120  
L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:180  
L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:240  
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:300  
L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:360  
L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:960  
L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1020  
L:370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1440  
L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1560  
L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1620  
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1860  
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1920  
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:2040  
L:1556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:16  
L:1559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:32  
L:1568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:80  
L:1616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:16  
L:1692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
L:1756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:80  
L:1795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:16  
L:1841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
L:1847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:32  
L:1850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:48  
L:1853 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:64  
L:1892 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0  
L:1895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:16  
L:1898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:32  
L:1931 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0  
L:2010 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:16  
L:2043 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0  
L:2082 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0  
L:2085 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:16  
L:2091 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:48  
L:2118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
L:2154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0  
L:2186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:60  
L:2187 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:120  
L:2188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:180

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002

TIME: 14:19:21

Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

L:2189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:240  
L:2190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:300  
L:2191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:360  
L:2212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:60